# Baton Rouge Community College

*Academic Affairs Master Syllabus*

**Date Approved or Revised: July 24, 2008**

**Course Name: Environmental Science and Decision Making**
**Course Number: ENVS 201**

**Lecture Hrs. 3** **Lab Hrs. 0** **Credit Hrs. 3**

**Course Description:** Provides a learning environment that facilitates the learning of science concepts and skills necessary to identify, understand, and analyze environmental issues. Louisiana environmental issues will be embedded throughout the course. This course will investigate these issues from scientific, social, economic, and political perspectives. Students will develop an awareness of environmental issues needed to become informed citizens and able to make personal and social decisions.

**Prerequisites:** MATH 094 or higher
**Co-requisites:** CHEM 130, BIOL 101, or PHSC 101 strongly recommended

**Suggested Enrollment Cap:** 30

**Learning Outcomes:** Upon successful completion of this course, the student will be able to:

- Demonstrate a fundamental knowledge of environmental science concepts in the areas of scientific method, ecosystems and biodiversity, renewable and nonrenewable resources, environmental quality, global changes, and environmental policy and decision making;
- Analyze, evaluate, and apply environmental science concepts in their lives, in the natural world, and in society using decision making skills;
- Use computer technology to access, retrieve, process, organize, and communicate data and information relevant to fundamental environmental science concepts;
- Use standard English and appropriate citation of outside resources to effectively communicate basic environmental science literacy;
- Organize and develop unified, coherent paragraphs with such patterns of organization as narration, description, analysis, comparison and contrast, cause and effect, and classification on class assignments; and
- Interpret images, scientific graphs and models used to illustrate environmental concepts.

**General Education Learning Outcomes:** This course supports the development of competency in the following areas. Students will:

- Think critically, collect evidence (statistics, examples, testimony) and make decisions based on the evidence, comprehend and analyze texts, and solve problems using methods of critical and scientific inquiry;
- Communicate effectively using standard written English;
- Relate the general concepts of science to the world and demonstrate an understanding of the impact of these processes and their concepts on human lives;
- Use computer technology to access, retrieve, process, and communicate information;
- Apply global perspectives and ideas by utilizing an interdisciplinary approach; and
- Apply core values in making ethical, personal, social, and professional decisions.

## Assessment Measures:

- Individual instructor-designed exams will collectively assess learning outcomes and will be administered during the semester as listed on the course syllabus;
- Individual instructor-designed comprehensive final, adhering to a department-determined content, will assess all learning outcomes;
- Individual instructor-designed or collaborative instructor-designed assignments and projects and
- All assignments will be graded using an instructor-designed rubric.

**Information to be included on the Instructors' Course Syllabi:**

- ***Disability Statement*:** Baton Rouge Community College seeks to meet the needs of its students in many ways. See the Office of Disability Services to receive suggestions for disability statements that should be included in each syllabus.

- ***Grading:*** The College grading policy should be included in the course syllabus. Any special practices should also go here. This should include the instructor's and/or the department's policy for make-up work. For example in a speech course, "Speeches not given on due date will receive no grade higher than a sixty" or "Make-up work will not be accepted after the last day of class."

- ***Attendance Policy*:** Include the overall attendance policy of the college. Instructors may want to add additional information in individual syllabi to meet the needs of their courses.

- ***General Policies*:** Instructors' policy on the use of things such as beepers and cell phones and/or hand held programmable calculators should be covered in this section.

- ***Cheating and Plagiarism*:** This must be included in all syllabi and should include the penalties for incidents in a given class. Students should have a clear idea of what constitutes cheating in a given course.

- ***Safety Concerns:*** In some programs this may be a major issue. For example, "No student will be allowed in the safety lab without safety glasses." General statements such as, "Items that may be harmful to one's self or others should not be brought to class."

- ***Library/ Learning Resources:*** Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

## Expanded Course Outline:

I. Introduction to Environmental Science
   A. Observing and investigating the environment
   B. Environmental problem solving
   C. Environmental decision making

II. Ecosystems and Biodiversity
   A. Levels of Organization
   B. Interdependence of living things
   C. Adaptation of living things
   D. Energy flow
   E. Cycling of matter
   F. Kinds of ecosystems
   G. Population dynamics and changing ecosystems
   H. Sustaining ecosystems

III. Human Population Dynamics
   A. History of human population
   B. Global distribution of population
   C. Carrying capacity
   D. Cultural and economic influence
   E. Risk analysis
   F. Economics and the environment
   G. Urbanization and suburban sprawl

IV. Renewable and Nonrenewable Resources
   A. Water
   B. Air, atmosphere, and climate
   C. Land and soil
   D. Energy
   E. Waste
   F. Civic environmentalism and public policy